FOR MODERN LIGHTING USE PERMAFLECTORS

The Silvered Glass Reflectors with the Permanent Efficiency

PITTSBURGH REFLECTOR COMPANY

PERMAFLECTOR *Lighting* BY PITTSBURGH

PERMAFLECTORS • LUSTROLIERS • LUMINAIRES • SPOTLIGHTS • FLOODLIGHTS

A COMPLETE LINE

Two decades of manufacturing experience and engineering research form the background for Permaflectors, the modern word for good lighting. In 1916, after much experimental work, we developed a process for protecting the silver reflecting surface of Permaflectors with copper. This process enabled us to absolutely guarantee Permaflectors against weaknesses common to other silvered glass reflectors.

Today, hundreds of thousands of Permaflectors have been in service for ten, fifteen and twenty years and yet not one out of ten thousand has been reported to us as having the silvered reflecting surface darken, or the backing crack, check or peel.

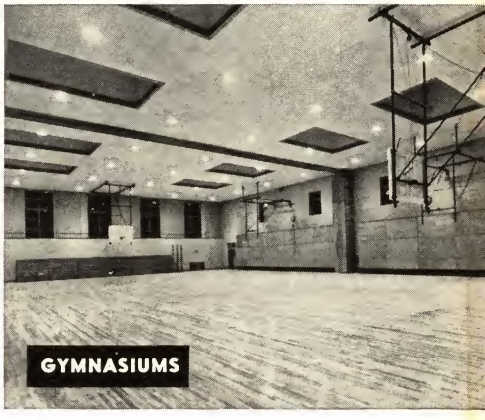
The Permaflector line of silvered glass reflectors includes more than 70 designs—a correctly shaped unit for practically every need in the lighting of show windows, cove lighting, direct and indirect lighting, flood lighting and color lighting.

Various types of lighting installations require the use of special auxiliary equipment for adapting Permaflectors to local architectural conditions. Therefore, there is available to you a complete line of auxiliary equipment especially designed by our engineers to permit the Permaflectors to perform with maximum efficiency. Special equipment includes "Lustroliers," luminaires, floodlights, spotlights, urns, housings for industrial and built-in equipment, roundels, color-lites, louvers, knockout strip and numerous fittings.

The completeness of the Permaflector line helps to simplify your job of selecting proper lighting equipment as there is scarcely any lighting problem which Permaflector equipment will not help solve.

Front Cover: Crown Jewelry Store, New Kensington, Pa. Architect—H. H. Lefkowitz

YOUR NEAREST PERMAFLECTOR REPRESENTATIVE



WIDE APPLICATION

Illustrated above are a few of the many different types of Permaflector installations. These illustrations demonstrate the wide application of Permaflectors—both in lighting treatment and classes of architectural problems.

In addition to those shown above, there are Permaflector installations in hotels, art galleries, banks, museums, laboratories, department stores, night clubs, stock exchanges, apartment buildings, residences, etc.

Occasionally an unusual or entirely new lighting problem develops which requires a unit of special design. A new unit that will solve the problem with utmost efficiency is promptly designed by our engineering department. In this way the Permaflector line is continually changing and ever widening in its application.

PERMAFLECTOR ENGINEERING SERVICE FOR ARCHITECTS . . . . . .

A glance at the following pages of this catalog will indicate the great variety of reflectors and complete lighting units we have for various lighting conditions. We realize that it would be almost an impossibility for our customers to be able to select the Permaflector best suited for a particular lighting condition. Having designed and produced the line, our engineers have a thorough knowledge of the proper lighting applications for the various units.

For this reason we offer the services of our engineering department to you at no extra cost. When you are planning a lighting installation, consult our engineering department at Pittsburgh, or any of our field representatives all of whom have a thorough knowledge of lighting needs. Our trained men will make certain that you have selected the correct Permaflector for your particular requirements. Do not hesitate to make use of this service.

LIGHTING IN ARCHITECTURE . . . . . .

• INFLUENCE OF LIGHT ON ARCHITECTURAL DESIGN

Leading and progressive architects are realizing the value of light as an important influence on the beauty and utility of their architectural designs. Accordingly, they are planning their structures with light as an integral part of their designs.

Planned lighting enhances the beauty of any architectural interior or exterior. Moldings, fluted bands or columns, pilasters and walls become alive with glowing richness. Skillful balancing of light and shade accents structural lines and three dimensional patterns. In modern architecture, planned lighting creates an "organic" decorativeness—a "related" beauty that is unexcelled.

Those who practice new architectural truths know they are founded on functional efficiency. Production, safety, morale and health are strongly effected by lighting. Ease of seeing is important in work or play. Various tasks of seeing require different levels and character of illumination. Planned lighting provides proper illumination where and when it is needed thereby contributing greatly to functional efficiency.

Modern efficient lighting equipment is the new tool with which the architect achieves designs of distinctive beauty and functional efficiency.

• FUNDAMENTALS OF GOOD LIGHTING

Good lighting, regardless of the job, requires just five things:

1. Proper size and type of lamp.
2. Correct location and spacing.
3. Good reflectors.
4. Correct design.
5. Correct installation.

It is the purpose of this catalog to suggest the correct answer to these questions as applied to as many different types of lighting problems as may be possible. However, since nearly every architectural lighting problem presents individual influencing factors that must be considered we find it advisable to supply complete details on our entire line through our engineering department and catalogs.

• SELECTION OF REFLECTING SURFACE

	Absorption Loss
Polished silver, unprotected, new (darkens rapidly—not practical)	5%
Silver plated glass	10%
Nickel, freshly polished (tarnishes rapidly)	40%
Aluminum (varies with quality and finish)	20-40%
Stainless steel, more than	60%

From this tabulated data—the particular efficiency and adaptability of silver-plated glass is established. But it is not sufficient to select any silver-plated glass reflector. Unless the silver-plating be properly protected, the silvered reflecting surface will gradually deteriorate, until it has no more value than aluminum, stainless steel, or other similar surfaces.

There is one silvered glass reflector which does stay bright—the reflecting surface of which does not discolor.

Permaflectors stay bright—at the end of ten, fifteen, twenty-five or thirty years, you will find the reflecting surface of Permaflectors just as bright, just as efficient, as when first placed in service.

• LASTING BRIGHTNESS OF PERMAFLECTORS

Use all the light you need—but get all the light you pay for. Light, like water and gas, costs money. So use the light you buy to the best advantage. Just as a cheap gas burner wastes gas, so a cheap reflector, or one not specifically adapted to the purpose intended, wastes electricity.

The secret process of copper-sealing the silver-plated glass developed by the Pittsburgh Reflector Company, has caused the name "Permaflector" to mean the most efficient reflector for lighting yet produced. More than 70 different designs afford a range wide enough to meet any lighting requirements. Regardless of the shape selected, uniform quality is assured by our completely controlled process of manufacture.

1. The "foundation" of a Permaflector—clear, sparkling Crystal Glass, blown in our own plant. Because every step in the manufacture of the glass used in Permaflectors is controlled by us, the high quality runs uniform.

2. Outside double-plated with pure silver, the reflecting surface that absorbs the least amount of light. When protected by the Pittsburgh method it retains permanently its original bright luster.

3. Copper plating covers the silver, sealing it permanently against tarnishing. Like a copper roof it is a lifetime protection.

4. A special silver colored satin finish, attractive and distinctive is properly applied over the copper coating. This finish of neutral tone harmonizes admirably with all surrounding materials and fitments.

1 2 3 4

SHOW WINDOW LIGHTING

The four important factors to be considered in the selection of lighting equipment for show windows are as follows: 1. To conceal the light source and thus avoid glare; 2. Locate the lamps to illuminate the display; 3. To control the light that would ordinarily be wasted on the ceiling or sidewalks, redirecting and concentrating it on the display plane; 4. To use plenty of light, not merely for visibility, but to attract passers-by.

The dimensions of the window determine the type of reflector to be used. For example, shallow windows require a reflector of concentrated distribution while deep windows demand a reflector of broad distribution.

Permaflector show window equipment is complete, including fourteen reflectors of various wattages in four different distributions and three general installation arrangements. For complete installation details consult your local Permaflector engineer listed on Page Twelve.

DeRoy Jewelry Store, Pittsburgh, Pa.

Architect, H. H. Lefkowitz

A FEW TYPICAL SHOW WINDOW PERMAFLECTORS WITH INSTALLATION DATA

PERMAFLECTOR NO. 55

Application: For windows with medium trim; island windows; or windows with upper portion of background of glass. Also for other display lighting, churches, indoor sports, and indirect cove lighting.

Spacing Recommended: 12 in. on centers.

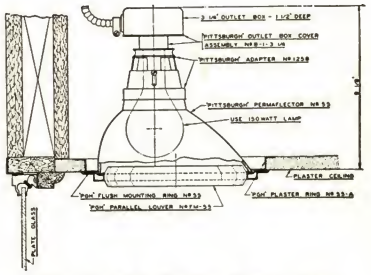
Bottom Opening: Circular, 8½ in. diameter.

Lamp Size:
100 watt A-23, Adapter compressed.
150 watt A-25, Adapter extended.

Mounting: May be mounted on Conduit (Nos. 1, 61 or Knockout Strip KO-1) or Outlet Box Cover Assembly (Nos. B-1-3¼ or B-1-4).

When Recessed: ***In Plaster Ceiling***
—use Plaster Ring, No. 55-A with Flush Mounting Ring, No. 55.
In Ceiling Not Plastered
—use Flush Mounting Ring, No. 55.

Louvers: ***For External Mounting***
—Nos. EM-55 or EM-88-CA.
For Recessed Mounting
—Nos. FM-55 or FM-88-CA (use with Flush Mounting Ring, No. 55).



No. 55 with Plaster Ring, Flush Mounting Ring and Louver
Minimum spacing 11 in. on centers.

PERMAFLECTOR NO. 57

Application: For windows having height 2 to 3 times the depth; or windows in which display is placed low—such as jewelry, etc.

Spacing Recommended: 12 in. on centers.

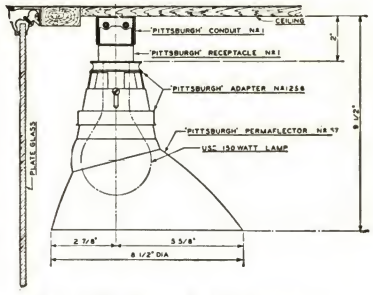
Bottom Opening: Circular, 8½ in. diameter.

Lamp Size:
100 watt A-23, Adapter compressed.
150 watt, A-25, Adapter extended.

Mounting: May be mounted on Conduit (Nos. 1, 61 or Knockout Strip KO-1) or Outlet Box Cover Assembly (Nos. B-1-3¼ or B-1-4).

When Recessed: ***In Plaster Ceiling***
—use Plaster Ring, No. 55-A with Flush Mounting Ring, No. 55.
In Ceiling Not Plastered
—use Flush Mounting Ring, No. 55.

Louvers: ***For External Mounting***
—Nos. EM-55 or EM-88-CA.
For Recessed Mounting
—Nos. FM-55 or FM-88-CA (use with Flush Mounting Ring, No. 55).



No. 57 General Arrangement
Minimum spacing 9 in. on centers.

PERMAFLECTOR NO. 990

Application: Illuminates full height of background without sharp cut-off of more concentrating types. Also for indirect lighting from wall urns, coves, columns and indirect floor lamps.

Spacing Recommended: 12 in. on centers.

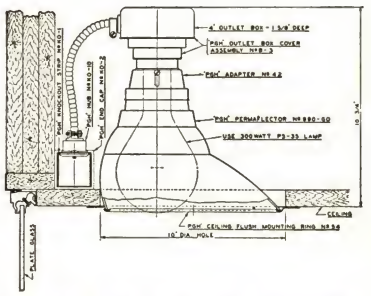
Bottom Opening: Circular, 9½ in. diameter.

Lamp Size:
300 watt PS-35, any position.
500 watt PS-40, for indirect lighting, ***base down only.***

Mounting: May be mounted on Conduit (No. 6)—in which case discard Outlet Box Cover.

When Recessed: ***In Plaster Ceiling***
—use Plaster Ring, No. 54 with Flush Mounting Ring, No. 54.
In Ceiling Not Plastered
—use Flush Mounting Ring, No. 54.

Louvers: ***For External Mounting***
—Nos. EM-54 or EM-99-CA.
For Recessed Mounting
—Nos. FM-54 or FM-99-CA (use with Flush Mounting Ring, No. 54).



No. 990 Flush Mounting Arrangement
Minimum spacing 12 in. on centers.

COVE LIGHTING

Cove lighting is a distinctive type of totally-indirect lighting that has the additional advantage of entirely concealing the light sources. This elimination of the usual visible means of artificial lighting together with the high diffusion and even distribution of illumination provides the closest approximation to natural daylight at its best.

Cove lighting is structurally a part of the room itself which makes it functionally modern and beautiful in its simplicity and close relationship. Accordingly, for best appearance and efficiency cove lighting should be carefully detailed in the original plans.

Our P-Type Permaflectors are particularly adapted to securing the best results from this desirable form of illumination. They are especially designed for lamps in a horizontal position which conserves space in the cove. Selecting the correct Permaflector for cove lighting depends upon the kind of ceiling, width of room, and distance of cove from ceiling to floor. For complete installation details consult your local Permaflector engineer listed on Page Twelve.

Knoxville Presbyterian Church, Pittsburgh, Pa.

A FEW TYPICAL PERMAFLECTORS FOR COVE LIGHTING WITH INSTALLATION DATA

PERMAFLECTOR NO. P-25

Application: For cove lighting, wall cases, bank cages, etc. Also for multi-unit, low wattage indirect fixtures. Broad distribution.

Minimum Spacing: 6 in. on centers.

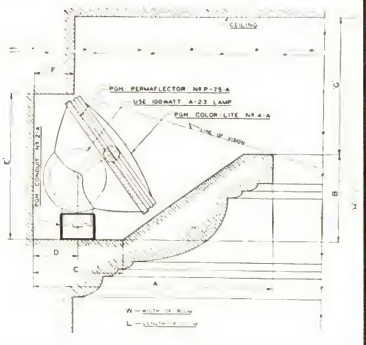
Dimensions: Opening, $3\frac{13}{16}$ in. diameter; height, 3¼ in.; length, $4\frac{13}{32}$ in.

Lamp Size:
25 watt A-19.
40 watt A-19.

Holder: With Conduit No. 2-A or Outlet Box Cover Assemblies No. B-2-3¼ or B-2-4, use 2¼ in. Form "S" holder for 25 watt A-19 lamp; 2¼ in. Form "SL" holder for 40 watt A-19 lamp, attached directly to socket.

May Be Installed with Outlet Box Cover Assembly: No. B-2-3¼ or B-2-4 with 2¼ in. Form "S" or "SL" holders.

May Be Mounted on Conduit: No. 2-A with 2¼ in. Form "S" or "SL" holders.



PERMAFLECTOR NO. P-76

Application: For indirect lighting from coves. Very broad distribution. Also for indirect lighting fixtures in special applications where spacing is limited.

Minimum Spacing: 7½ in. on centers.

Dimensions: Opening, 4¾ in. diameter; height, 3 in.; length, $5\frac{9}{16}$ in.

Lamp Size:
60 watt A-21.
75 watt A-21.
100 watt A-23.

Holder: With Conduit No. 2-A, or Outlet Box Cover Assemblies No. B-2-3¼ or B-2-4, use 2¼ in. Form "S" holder for 60 watt A-21 lamp; 2½ in. Form "SL" holder for 75 watt A-21 lamp; 2¼ in. Form "L" holder for 100 watt A-23 lamp, attached directly to socket.

May Be Installed with Outlet Box Cover Assembly: No. B-2-3¼ or B-2-4 with 2¼ in. Form "S", "SL" or "L" holders.

May Be Mounted on Conduit: No. 2-A with 2¼ in. Form "S" "SL" or "L" holders.

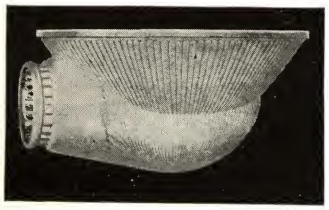
For Colored Lighting: Use Color-Lite—No. 12-A or No. 12-ADB.

COVE LIGHTING DESIGN

In the above sketch the essential dimensions required by our engineering department for a proper cove lighting recommendation are indicated by the letters W, L, G, H.

Dimensions for letters A, B, C, D, E, and F will be supplied by our engineering department together with the proper Permaflector.

An arched ceiling may be treated in a similar manner.



PERMAFLECTOR NO. P-75-A

Application: For cove lighting where a concentrated distribution is required; also for stock quotation boards, art galleries, indirect lighting fixtures.

Minimum Spacing: 7¾ in. on centers.

Dimensions: Opening, 6¾ in. diameter; height, 3⅝ in.; length, 7 in.

Lamp Size:
100 watt A-23.

Holder: With Conduit No. 2-A or Outlet Box Cover Assemblies No. B-2-3¼ or B-2-4, use 2¼ in. Form "S" holder attached directly to socket.

May Be Installed with Outlet Box Cover Assembly: No. B-2-3¼ or B-2-4 with 2¼ in. Form "S" holder.

May Be Mounted on Conduit: No. 2-A with 2¼ in. Form "S" holders.

For Colored Lighting: Use Color-Lite—No. 4-A or No. 4-ADB.

WHERE COVE LIGHTING MAY BE USED

Churches
Ball Rooms
Theatres
Night Clubs
Court Rooms
Residences
Retail Stores
Libraries

BUILT-IN LIGHTING

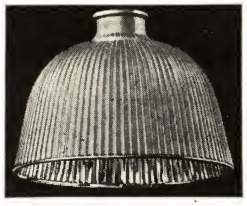
Permaflector Built-In Direct Lighting is another modern method of illumination which features concealed lighting equipment built in the structure. An efficient Permaflector together with auxiliary equipment is recessed into the ceiling allowing the mouth of the reflector to remain flush with ceiling line. Source of light is concealed by means of louvers, roundels or ornamental glass covers thus providing effective and efficient concealment.

This type of illumination is especially adaptable to merchandising in department stores, dress shops, jewelry and shoe stores. It frees the overhead space from the usual hanging fixtures and provides glareless high intensity illumination on the counters and display cases as well as adequate general illumination over the entire interior. Its simplicity imparts a feeling of spaciousness and allows unbroken view of the store and merchandise. For complete installation details consult your local Permaflector engineer listed on Page Twelve.

Kitty Kelly Shoe Store, Chicago, Ill.

Architect, A. S. Alschuler

A FEW TYPICAL PERMAFLECTORS FOR BUILT-IN LIGHTING WITH INSTALLATION DATA



PERMAFLECTOR NO. E-100

Application: A broadly distributing reflector for direct lighting service. Used exposed in factories or recessed as in gymnasiums, below mezzanine floors and other locations with low head room.

Bottom Opening: Circular, 8½ in. diameter.

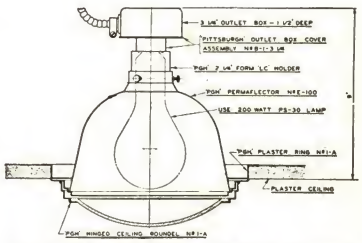
Lamp Size:
100 watt A-23.
150 watt A-25.
200 watt PS-30.

Mounting: May be mounted on Conduit (Nos. 1, 61 or Knockout Strip KO-1) or Outlet Box Cover Assembly (Nos. B-1-3¼ or B-1-4). Use with 2¼ in. Holder, Form "S", "L", or "LC".

When Recessed: ***In Plaster Ceiling*** —use Plaster Ring No. 55-A with Flush Mounting Ring, No. 55; or Plaster Ring, No. 1-A with Hinged Ceiling Roundel, No. 1-A or Hinged Concentric Louver No. 1-A.

In Ceiling Not Plastered —use Flush Mounting Ring, No. 55; or Hinged Ceiling Roundel No. 1-A; or Hinged Concentric Louver No. 1-A.

Louvers: ***For External Mounting*** —Nos. EM-55 or EM-55-C.



No. E-100 with Hinged Ceiling Roundel

PERMAFLECTOR NO. E-225

Application: For uses similar to E-100 and E-200, where an extremely broad distribution is desired. Also a good reflector for indirect lighting applications.

Bottom Opening: Circular, 9½ in. diameter.

Lamp Size:
150 watt A-25, Adapter compressed.
200 watt PS-30, Adapter extended.

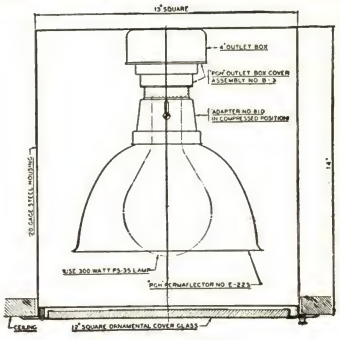
Mounting: May be mounted on Conduit (Nos. 1, 61 or Knockout Strip KO-1) or Outlet Box Cover Assembly (Nos. B-1-3¼ or B-1-4).

When Recessed: ***In Plaster Ceiling*** —use Plaster Ring, No. 54 with Flush Mounting Ring, No. 54; or Plaster Ring, No. 6 with Hinged Ceiling Roundel No. 6; or Hinged Concentric Louver No. 6.

In Ceiling Not Plastered —use Flush Mounting Ring, No. 54; or Hinged Ceiling Roundel No. 6; or Hinged Concentric Louver, No. 6.

Louvers: ***For External Mounting*** —Nos. EM-54 or EM-54-C.

For Recessed Mounting— —Nos. FM-54, FM-54-C, FEC-200 (use with Flush Mounting Ring, No. 54); or Hinged Concentric Louver, No. 6.



NO. GR-30012

PERMAFLECTOR NO. C-101-A

Application: May be set flush in ceiling and louvered for spot lighting effects.

Spacing Recommended: 12 in. on centers.

Bottom Opening: Circular, 8⅛ in. diameter.

Lamp Size:
150 watt A-25, Adapter compressed.
200 watt PS-30, Adapter extended.

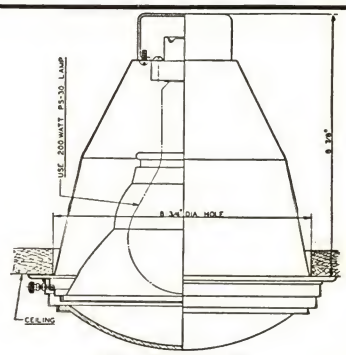
Mounting: May be mounted on Conduit (Nos. 1, 61 or Knockout Strip No. KO-1) or Outlet Box Cover Assembly (Nos. B-1-3¼ or B-1-4).

When Recessed: ***In Plaster Ceiling*** —use Plaster Ring, No. 55-A with Flush Mounting Ring, No. C-100; or Plaster Ring No. 1-A with Hinged Ceiling Roundel No. 1-A or Hinged Concentric Louver No. 1-A.

In Ceiling Not Plastered —use Flush Mounting Ring No. C-100; or Hinged Ceiling Roundel No. 1-A; or Hinged Concentric Louver No. 1-A.

Louvers: ***For External Mounting*** —Nos. EM-55 or EM-55-C.

For Recessed Mounting— Nos. FM-55, FM-55-C, FEC-100 (use with Flush Mounting Ring No. C-100); or Hinged Concentric Louver, No. 1-A.



NO. FC-101-1A

LIGHTING FIXTURES

Permaflector lighting fixtures may be classified as four distinct types: totally indirect luminaires, indirect "Lustroliers" with illuminated bowls, indirect "Lustroliers" with minor direct lighting component and direct luminaires. Each classification includes a number of designs reflecting various styles of modern decorative design.

Every Permaflector Luminaire is equipped with a Permaflector which efficiently and correctly controls the light. The bowl serves merely as an enclosure for the Permaflector. Any method which places reliance on the enclosing bowl for reflection and control of the light flux from the lamp gives results which vary from one design to another.

Well-balanced proportions, simplicity and graceful flowing lines make Permaflector "Lustroliers" and Luminaires beautifully modern. They harmonize exceedingly well with modern interiors and furnishings. For complete installation details consult your local Permaflector engineer listed on Page Twelve.

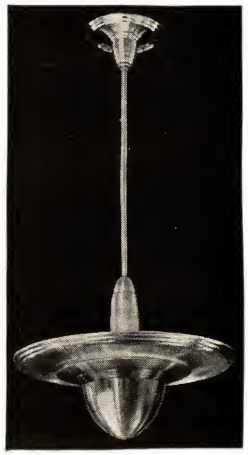
Ohrbach's Inc., Newark, N. J.

A FEW TYPICAL PERMAFLECTOR LUMINAIRES AND LUSTROLIERS WITH INSTALLATION DATA

A-50 B-50
INDIRECT

TYPE OF LAMP	* 1000 watt T-24 Bipost	300-500 Watt PS-type Inside Frosted
Luminaire No. (Equipped with stem hanger only)	A-50	B-50
Diameter of Bowl	20"	20"
Standard Suspension:		
Top of Bowl to Ceiling	36"	30"
Overall Length	43¼"	37¼"
Permaflector No.	B-509	B-509
Standard Finish	Scratched and Polished Aluminum	Scratched and Polished Aluminum
Shipping Weight (One Luminaire packed)	7½ lbs.	7½ lbs.

TYPE OF LAMP	* 750-1000 watt T-24 Bipost	300-500 Watt PS-type Inside Frosted
Lustrolier No. (Equipped with stem hanger only)	R-591	N-591
Diameter of Bowl	20"	20"
Standard Suspension:		
Top of Bowl to Ceiling	36"	30"
Overall Length	43¼"	37¼"
Permaflector No.	B-509	B-509
Standard Finish	Scratched and Polished Aluminum	Scratched and Polished Aluminum
Shipping Weight (One Lustolier packed)	8 lbs.	8 lbs.



R-591 INDIRECT N-591 ILLUMINATED BOWL

N-562 N-1062
DIRECT-INDIRECT

Standard Lamps, Size	300-500 Watt	750-1000 Watt
Lustrolier No.	N-562	N-1062
Direct Component Transmitted Through	Etched Glass Disc	Etched Glass Disc
Diameter of Bowl	21"	28"
Standard Suspension:		
Top of Bowl to Ceiling	30"	36"
Overall Length	37"	45"
Permaflector No.	B-507	B-1007
Standard Finish	Roman Silver	Roman Silver
Daylight Lighting For Direct Component Use Color-Lite (optional) No.	F-7 DB	F-8 DB

TYPE OF LAMP	200 Watt Medium Base PS-30 inside frosted or 300 Watt Medium Base PS-35 inside frosted	300-500 Watt Mogul Base PS-type Inside Frosted	750-1000 Watt Mogul Base PS-52 Inside Frosted
Luminaire No. (Equipped with stem hanger only)	3200	5300	1750
Diameter of Bowl	20"	22"	28"
Standard Suspension:			
Top of Bowl to Ceiling	30"	30"	36"
Overall Length	35"	35½"	42¾"
Permaflector No.	E-225-GO	E-500-GO	I-1005-GO
Standard Finish	Scratched and Polished Aluminum	Scratched and Polished Aluminum	Scratched and Polished Aluminum
Shipping Weight (One Luminaire packed)	19 lbs.	20 lbs.	35 lbs.

Nos. 3200, 5300, 1750
DIRECT

INDUSTRIAL LIGHTING

Architects have invaded the industrial field and exploded the theory that darkness, confusion and ugliness are inseparable from industry. For, in the factory, the architect is face to face with the machine—the basis of modern architectural design. It is not surprising, therefore, to find utter simplicity, structural strength, and, above all, orderliness, cleanliness and brightness in modern plants.

Good lighting is an important factor in modern industrial plant design. Proper illumination contributes greatly to safety, efficiency and economy. Accidents are lessened, spoilage reduced and production increased thereby lowering costs.

The Permaflector line includes a correctly designed unit for every type of industrial interior—high bay units for heavy manufacturing operations; intermediate units for fabricating plants; focusing units for local lighting over machines, benches, etc. For complete installation details consult your local Permaflector engineer listed on Page Twelve.

General Steel Castings Corp., Eddystone, Pa.

A FEW TYPICAL PERMAFLECTORS FOR INDUSTRIAL LIGHTING WITH INSTALLATION DATA

No. I-505-S

PERMAFLECTOR NO. I-505-S

Description: Permaflector No. I-050-GO enclosed in aluminum housing. Attaches to any ½ in. conduit hanger.

Application: For high bay industrial interiors, gymnasiums, auditoriums, boxing arenas, etc. Used where protection of silvered glass reflector is desirable.

Dimensions: Diameter, 16½ in.; height, overall, 16½ in.

Lamp Size: 500 watt PS-40; 300 watt PS-35.

PERMAFLECTOR NO. I-505-RS

Description: Same as I-505-S but equipped with hinged door carrying heat-resisting stippled glass roundel.

Application: Same as I-505-S.

Dimensions: Diameter, 17 in.; height, overall, 19 in.

Lamp Size:
500 watt PS-40.
300 watt PS-35.

No. I-505-RS

No. I-1000-S

PERMAFLECTOR NO. I-1000-S

Description: Permaflector No. I-505-GO enclosed in aluminum housing complete with mogul socket and arranged to attach to any ½ in. conduit hanger. Permaflector removable.

Application: Same as Permaflector No. I-505-S. To be used where higher intensity is required.

Dimensions: Diameter, 16½ in.; height, overall, 18½ in.

Lamp Size:
1000-750 watt PS-52.

PERMAFLECTOR NO. I-1000-RS

Description: Same as I-1000-S but equipped with hinged door carrying heat-resisting stippled glass roundel.

Application: Same as I-1000-S.

Dimensions: Diameter, 17 in.; height, overall, 21 in.

Lamp Size:
1000-750 watt PS-52.

No. I-1000-RS

No. E-500-S

PERMAFLECTOR NO. E-500-S

Application: A reflector of wide utility. It is enclosed in aluminum housing for industrial and public space illumination. Excellent for use above skylights.

Lamp Size:
500 watt PS-40.
300 watt PS-35.

Description: Permaflector No. E-500-S employs Permaflector No. E-500-GO enclosed in aluminum housing. Permaflector readily removable. Furnished complete with socket. Attaches to any standard ½ in. conduit hanger.

Dimensions: Diameter, 12½ in.; height, overall, 15¼ in.

PERMAFLECTOR NO. C-1000-S

Description: Consists of Permaflector No. F-1001 enclosed in aluminum housing with hinged door containing 15¾ in. diam. inside stippled heat-resisting glass roundel, making it dust tight. Attaches to any standard ½ in. conduit hanger.

Application: For high industrial interiors, gymnasiums, auditoriums, boxing arenas, etc. At 25-foot mounting height, covers an area on the floor of 18.2 foot diameter; at 100-foot mounting, covers 72.8-foot diameter.

Dimensions: Diameter, 17 in.; height, overall, 21 in.

Lamp Size: 1000-750 watt PS-52.

No. C-1000-S

PERMAFLECTOR *Lighting* BY PITTSBURGH

PERMAFLECTORS • LUSTROLIERS • LUMINAIRES • SPOTLIGHTS • FLOODLIGHTS

THEATRE LIGHTING

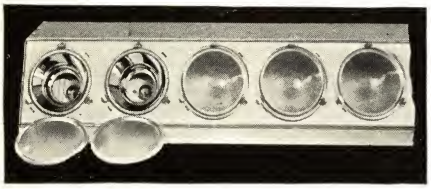
In the theatre lighting plays a dramatic part in joining with architectural form to create the desired atmosphere. Here, the scheme of the structure in general should reflect colorfulness, joy and imaginative fancy. To create these moods it is necessary to bring into play many different types of Permaflector equipment such as cove reflectors, floodlights, recessed units and fixtures. Special lighting effects with this equipment requires individual consideration on each job at the time of design.

However, stage lighting is more easily identified with the theatre and is somewhat standard as to practice. Therefore, we are able to present Permaflector lighting equipment especially designed for stage lighting in theatres, churches or schools.

Permaflector Stage Lighting equipment consists of built-in footlights—single and double, disappearing footlights, portable footlights, proscenium strip and border lights. Every piece of equipment contains Permaflectors to efficiently control the distribution of light. Various colors are supplied by colored glass roundels. For complete installation details consult your local Permaflector engineer listed on Page Twelve.

Severance Hall, Cleveland, Ohio.
Architects: Walker & Weeks

A FEW TYPICAL PERMAFLECTOR THEATRE ASSEMBLIES WITH INSTALLATION DATA



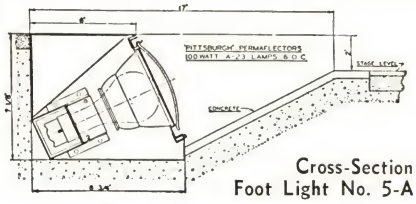
FOOT LIGHT NO. 5-A

Pittsburgh Foot Light No. 5-A is completely enclosed, self-contained, dust-tight. Sold complete with Permaflectors No. C-60 spaced 6 inches on centers and one F-7 Color-Lite for each outlet (Not Wired). Color-Lite No. F-7 available in red, blue, green, amber, moonlight or uncolored stippled.

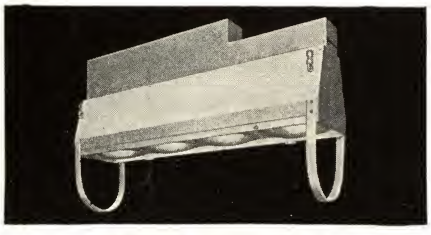
SELECTION DATA

Lamp Size: Use 100 watt A-23.

Note: As many 10 ft. 0 in. lengths are bolted together as may be required. Special lengths made up if required.



Cross-Section
Foot Light No. 5-A



BORDER LIGHT NO. 6

A completely enclosed, self-contained unit, built of 20 gauge galvanized iron, aluminum finish. Permaflector C-101 snugly set in metal bottom plate on 9 in. centers. Glass Color-Lites No. F-2 set in hinged metal plate for easy access to lamps.

Made in standard lengths of 9 ft. with 12 outlets 9 in. on centers. Strap steel guards 36 in. on centers. Wiring box installed at center or either end as specified. Terminal connection block furnished in wiring box for convenience of installation and maintenance.

Furnished complete as shown, unwired, but equipped with chain for attaching to pipe batten. Chains spaced 36 in. on centers.

We do not furnish pipe batten, strain insulator, flexible border light cable, lamps or rigging of any kind.

SELECTION DATA

Lamp Size: Use 200 watt PS-30.

Note: As many standard 9 ft. lengths are bolted together as may be required. When total length is not evenly divisible by 9 ft., one section is made special to required dimension.

COMPLETE LINE OF ACCESSORIES AND FITTINGS

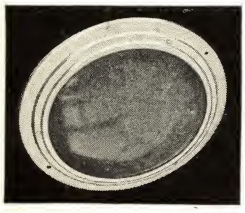
Illustrated herewith are a few of the many available accessories and fittings that complete the Permaflector line of lighting equipment. Accessories and fittings are especially designed for Permaflectors by our own engineers and contribute greatly to the flexibility and efficiency of Permaflector lighting equipment.

Color-Lites are available in a wide range of colors and may be attached to most types of Permaflectors. They are particularly well adapted for use with theatre and store lighting equipment.

Permaflector Louvers are complete, including concentric, eccentric, parallel and egg crate designs suitable for every installation requirement.

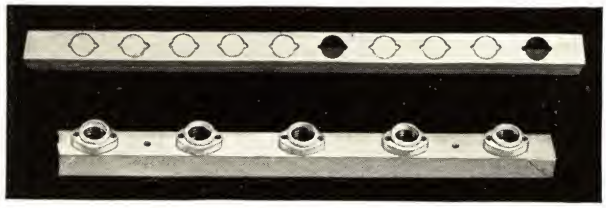
Additional Permaflector accessories and fittings are: glass roundels, flush mounting rings, plaster rings, spill shields, knockout strip, conduit, adapters, holders and many others. For complete installation details consult your local Permaflector representative listed on Page Twelve.

LOUVERS

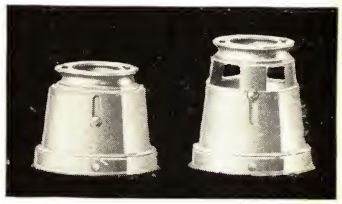


COLOR-LITES

ROUNDELS



CONDUIT, KNOCKOUT STRIP



ADAPTERS AND HOLDERS

YOUR NEAREST PERMAFLECTOR REPRESENTATIVE

A FEW TYPICAL PERMAFLECTOR INSTALLATIONS

Some of the nationally known firms listed below have been Permaflector customers for years—a direct result of efficient performance and dependability. Twenty-eight years of careful design and workmanship have made Permaflector lighting equipment the standard of accuracy and quality in the lighting field.

When you specify Permaflectors in your plans you also specify permanent efficiency. The lighting in your structure will be modern for many years to come because it will remain "functionally efficient."

If you do not reside in one of the cities shown here and would like to inspect a Permaflector installation, consult your local Permaflector representative. He will gladly arrange to show you an installation of Permaflectors in your city.

Department Stores

Gimbel Brothers.....New York City
Marshall Field & Co.....Chicago, Ill.
Frederick & Nelson.....Seattle, Wash.
Robert Simpson Co., Ltd.....Toronto, Canada
Wanamaker's .....Philadelphia, Pa.

Industrial Buildings

International Harvester Co.....Indianapolis, Ind. and
(Sales & Service).....Winnipeg, Canada
General Steel Castings Corp.....Eddystone, Pa.
Carnegie-Illinois Steel Co.....Pittsburgh, Pa.
American Sheet & Tin Plate Co.....Gary, Indiana
Glenn L. Martin Company.....Baltimore, Md.

Auditoriums

Severance Hall.....Cleveland, Ohio
Roosevelt High School.....Washington, D. C.
Fort Slocum.....New Rochelle, N. Y.
Women's Contemporary Club.....White Plains, N. Y.
Carmichaels High School.....Carmichaels, Pa.

Schools and Colleges

University of Washington.....Seattle, Wash.
Columbia University.....New York City
West Point M. A. Gymnasium.....West Point, N. Y.
Howard University.....Baltimore, Md.
University of Vermont,
Southwick Memorial.....Burlington, Vt.

Office Buildings

Oliver Building.....Pittsburgh, Pa.
Archives Building.....Washington, D. C.
Merchandise Mart.....Chicago, Ill.
Manufacturers Trust Co.....New York City
New Interior Department Building.....Washingon, D. C.

Other Installations

Horace C. Henry Art Gallery.....Seattle, Wash.
Pittsburgh Equitable Meter Co.....Pittsburgh, Pa.
Bronx Zoological Garden.....New York City
Royal Ontario Museum.....Toronto, Canada
American Museum of Natural History.....New York City

A 10-YEAR GUARANTEE AND A 22-YEAR RECORD

While there are guarantees and guarantees, a guarantee backed by twenty-two years of practical experience means something. When a customer purchases Permaflectors, he is less interested in the assurance that a responsible manufacturer will replace the equipment if it turns out to be defective than he is in the comfort of this conviction that the product is so good that it will never have to be replaced, a conviction backed up by twenty-two years of nearly faultless production.

"We unconditionally guarantee to the original purchaser that the backing on Pittsburgh silver plated glass reflectors will not crack, check or peel, and that the silvered reflecting surface will not tarnish, for a period of ten years from date of purchase from us."

If a Permaflector does not make good, we do, but from the 22-year record of almost perfection in the manufacture of silver plated glass reflectors you know that there is not one chance in ten thousand that any of the Permaflectors you purchase will go bad.

USING YOUR PERMAFLECTOR ENGINEERING SERVICE

We urge you to make free use of the services of our entire engineering staff. In addition to the Permaflector engineers in the field we maintain a staff of specially trained and experienced illumination engineers at our office in Pittsburgh. All of these men are thoroughly equipped to assist you in the selection of correct Permaflector equipment and in planning its installation. Their sympathetic understanding of architectural practice enables them to faithfully carry out the objectives created by the architect in each design.

Most architects prefer to use the above service. However, for those specialists whose experience and training permit them to detail lighting specifications, we offer our three Permaflector catalogs.

Catalog No. 38

Catalog No. 39

Catalog No. FL-1A

Permaflector Catalog No. 38 contains complete information on the entire line of Permaflectors, accessories and fittings.

Permaflector Catalog No. 39 presents complete details on Permaflector Fixtures, Lamps and Urns.

Permaflector Catalog No. FL-1A is devoted to complete details on Permaflector Floodlights.

For copies of these catalogs write direct to our Engineering Department in Pittsburgh or call your local Permaflector representative.

PERMAFLECTOR *Lighting*

PERMAFLECTORS · LUSTROLIERS · LUMINAIRES · SPOTLIGHTS · URNS
FLOODLIGHTS · LAMPS · BUILT-IN CEILING UNITS · ACCESSORIES

PERMAFLECTOR ENGINEERS

BRANCH OFFICES

CHICAGO, ILL.,
R. O. Williams, Mgr., 1158 Merchandise Mart. (Superior 0970).

NEW YORK, N. Y.,
Chas. H. Goddard, Mgr., 1775 Broadway (Circle 7-7055).

"Pittsburgh" Permaflector

REPRESENTATIVES

ATLANTA, GA.,
M. L. Whitman, Bona Allen Building (Walnut 0978).

BALTIMORE, MD.,
W. B. Masland Co., 621 W. North Ave. (La Fayette 4544).

BOSTON, MASS.
Detweiler-Bell Co., 25 South St. (Hancock 6191).

BUFFALO, N. Y.,
H. H. Mallon, 140 Elmwood Ave. (Lincoln 8954).

CLEVELAND, OHIO,
Handel-Davies Co., 202 Chester-Twelfth Bldg. (Main 2684).

DALLAS, TEXAS,
Geo. E. Anderson Co., Sante Fe Bldg. (7-4013).

DENVER, COLORADO,
Paul A. Douden, 1645 Wazee St. (Keystone 6798).

DETROIT, MICHIGAN,
J. Morris Jones, 8531 Orangelawn Ave. (Hogarth 5156).

INDIANAPOLIS, IND.,
Scott-Jaqua Co., Indiana Terminal Warehouse (Riley 7825).

KANSAS CITY, MO.,
Mervin Simons, 613 Manufacturers Exchange Bldg. (Harrison 2768).

LOS ANGELES, CALIF.,
Frank E. Hastings, 810 Transportation Bldg. (Trinity 9801).

MIAMI, FLA.,
Chalmers M. White, Ingraham Bldg. (2-6771).

MINNEAPOLIS, MINN.,
Balch Electric Co., 126 S. Tenth St., S. (Atlantic 3307).

OMAHA, NEBR.,
Garritt S. Felt, Merchants National Bank Building (Webster 3311).

PHILADELPHIA, PA.,
Hopkin Bros., Inc., 116 N. 7th St. (Lombard 8368).

RUTHERFORD, N. J.,
H. G. Otis, 131 Woodward Ave. (Rutherford 2-4740).

ST. LOUIS, MO.,
Hawkins & Hagen Electrical Sales Co., 315 N. 21st St. (Chestnut 4821).

SALT LAKE CITY, UTAH,
Raymond Ackerman, 318 Dooly Block (Wasatch 7282).

SAN FRANCISCO, CAL.
H. A. Gardner, 807 Flatiron Bldg. (Garfield 1885).

SEATTLE, WASH.,
Lyman D. Morgan, 239 Securities Bldg. (Elliott 7500).

WASHINGTON, D. C.,
Sam Masland, 410 Bond Building (National 3934).

PITTSBURGH REFLECTOR COMPANY
OLIVER BUILDING, PITTSBURGH, PENNSYLVANIA